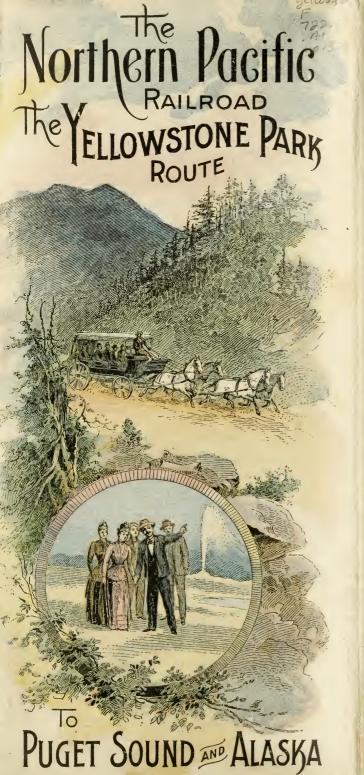
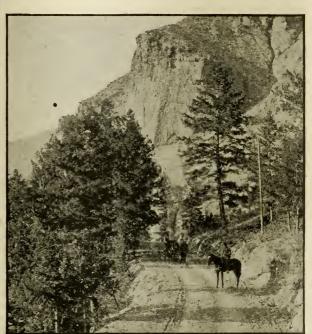
ONSIGNE CLARGIA The PACIFIC PAILROAD RAILROAD



THROUGH

YELLOWSTONE NATIONAL PARK

Lakes and the Western Ocean—in the very heart itself of the Rocky Mountains, high above the level of the sea—lies a volcanic plateau fifty-five by sixty-five miles in area, hemmed in by mountain spurs whose snow-mantled peaks attain an altitude ranging from 9,000 to 11,155 feet. Here everlasting springs abide, that feed the clear mountain rills that grow into rivulets, that swell into streams that ultimately become three of the grandest rivers



ENTRANCE TO PARK.

of the New World. Here, too, are terrace-building fountains of scalding, calcareous water indescribable in their strange beauty; uncanny pools of steaming, bubbling, parti-colored clay, out of whose seething depths counterfeit roses burst into bloom, bewilder for a moment, and vanish into thin air. Then, there are tremendous geysers, that cause the earth to groan and tremble by the violence of their eruptions; mighty cataracts, that appall the beholder; profound canons, that flame with color; beautiful vales, that blossom with flowers; sparkling streams, that teem with trout;

primeval forests, that abound with game; dancing cascades, that fret and foam in mimic rage, and—surpassing all else in quiet, restful loveliness—a limpid mountain lake, of broad expanse and picturesque beauty, such as the world, perhaps, does not contain the counterpart.

This, in brief outline, is the realm of wonders set apart by the Congress of the United States to be "a grand, national playground, a museum of unparalleled—indeed, incomparable—marvels, free to all men for all time." The Act of Dedication received Executive approval on the first day of March, 1872, and to the late Dr. F. V. Hayden, Chief of the Geological Survey of Territories, who made a thorough official examination of the region the preceding year, more than to any other one person, perhaps, is due the prompt introduction and passage of the legislative measure that will ever stand as a proud monument to the public spirit of a great and thoughtful nation. Prior to the year 1870, during



LEAVING MAMMOTH HOT SPRINGS FOR THE PARK

which Surveyor-General Washburn (of Montana), accompanied by N. P. Langford and a small escort from Fort Ellis, made a tour of exploration of a considerable part of the territory now embraced in the reserve, intelligence respecting this land of wonders was of a very meagre and fragmentary character. Probably the first white man to view its marvels was John Colter, an itinerant hunter and trapper, brought into public notice by his connection with the historic expedition sent out by the government in 1804, under Lewis and Clarke, to explore the sources of the River Missouri, the Rocky Mountains and the Columbia. We are told that, as this party was retracing its course down the Missouri on its return from a journey as successful as it had been filled with hardship and peril, and when it had reached a point not far from where the city of Mandan, N. D., now stands, Colter obtained permission, August 15, 1806, to remain in the neighborhood for the purpose of trapping beaver. For three subsequent years this intrepid hunter lived mainly

among the Bannacks, an Indian tribe whose hunting-ground embraced what is now the Yellowstone National Park, and very probably witnessed the grand eruptive displays of the geysers. On his return in the early winter of 1809-10 to St. Louis—then a mere frontier trading-post—so marvelous were his tales respecting the land of thermal wonders that he straightway attained notoriety as the leading prevaricator of the day. Even as late as 1844 James Bridger, the noted and entirely trustworthy Rocky Mountain guide and scout was unable, it is said, to get any of the Western newspapers to publish a description of this region of marvels from the reliable (though discredited) data which he was able to furnish.

These incidents of history are briefly recalled to show how recent is the whole subject; and, could we but know how



GOLDEN GATE.

few in number were the visitors to this almost fairyland prior to the building of the Northern Pacific Railroad—as late as 1882, even—we favored mortals of to-day would doubtless open wide our eyes in astonishment. In point of fact, with the construction of this great transcontinental thoroughfare to and beyond the Rockies, and the building of its branch line to Cinnabar—at the very threshold of the great reserve—Park travel may be said to date its practical beginning. The management and protection of this mammoth pleasure-ground devolves upon the Department of the Interior at Washington, its direct and immediate control being in charge of a superintendent, with headquarters at Mammoth Hot Springs, and a sufficient force of cavalry

"regulars" under his command to enforce obedience to his orders. Thus is the proper policing of the *reserve*, as well as the preservation of its multifarious objects of interest—and noble game—assured.

THE RIDE FROM LIVINGSTON TO CINNABAR. During the guest season (from June 1 to October 1, annually) daily trains are run both to and from Livingston and the Park boundary for the special accommodation of visitors. This brief journey of fifty-one miles is one of constantly changing scenic enjoyment, the route lying along the rocky margin of the Upper Yellowstone River, through narrow and precipitous cañons and winding, picturesque valleys, in plain view of the cool, glistening crests of the Snow Mountains. At Cinnabar guests are met by the large, easy-riding stages of the Yellowstone Park Association, and are driven to the spacious and well-appointed hotel at Mammoth Hot Springs, seven miles distant, arriving in time for lunch and an



OBSIDIAN CLIFF.

examination of the celebrated pink-terraced springs near by, before dinner.

THESE MAMMOTH HOT SPRINGS, so called, number fifty or more in the aggregate and occupy a mound (upwards of 170 acres in extent, nearly 200 feet in height, and embracing thirteen separate and distinct terraces) composed mainly of carbonate of lime deposited by their own action. This mound-building has gone on for ages untold, and affords the visitor of to-day as much food for reflection as at any period in its history. The temperature of the spring-pools varies from 112° to 163° Fahrenheit. About the rims of their bowl-shaped basins and on the sides and bottoms of the numerous little rills formed by their bubbling, wavelike overflow, coloring matter more or less striking, and varying in tint from the most delicate shades of cream and pink to deep red, is constantly being deposited, though the greater bulk of the "formation" is devoid of color resembling in

general appearance frozen cascades more than anything else, perhaps. At the base of the mound stand "The Devil's Thumb" and "Liberty Cap"—the latter fifty-two feet in height by twenty feet in diameter at its base—cones or chimneys of hot springs or geysers (possibly) long since extinct. The several cavelike openings visible from the hotel veranda are merely the crumbling vents of ancient springs similar to those upon the terraces above. The altitude of the hot spring mound (6,587 feet) is 1,000 feet higher than that of the Gardiner River, into which its scalding overflow drains, and 2,000 feet higher than the railroad terminal at Cinnabar.

THE PARK TOUR. Immediately after breakfast on the morning succeeding arrival at Mammoth Springs, guests



NORRIS GEYSER BASIN ROAD,

begin the regularly scheduled six-day tour of the Park; coaches, specially constructed with a view to safety and comfort, and carrying from three to eleven persons each (according to size of vehicle) being employed as conveyances. Trunks and like cumbersome articles of baggage are generally brought as far as the hotel at Mammoth Hot Springs only, hand-baggage sufficing for the remainder of the trip. When *necessary*, however, baggage can be transferred to and from Mammoth Springs and other hotels within the *reservation*.

GOLDEN GATE, a deep, narrow gorge between Bunsen Peak and Terrace Mountain, is the first point of special interest reached. While only four miles distant from the hotel at the springs, it is 1,000 feet higher, and is the only exit from the mountain-environed valley of the Gardiner River to the Geyser Basins, Lake and Cañon farther south. The roadway through this pass is nearly a mile in length, and, just before it leaves the cool shade of the overhanging cliffs for the open level of Swan Lake Basin, passes Rustic Falls—a pretty little cascade formed by the West Branch of the Gardiner.

OBSIDIAN CLIFF. A bold escarpment of volcanic glass arranged in rough columns, pentagonal in form, and of a glistening black, hangs high above the stage road midway between Mammoth Springs and Norris. While, to be sure, an object of no small curiosity and speculation, its chief interest lies in the fact that it is the sole considerable out-



GIBBON CANON ROAD

cropping of *obsidian* (or mineral glass) known. The placid little sheet of water to the right of the roadway, fringed with meadow grass and dotted with pond lilies, is the home of a small colony of beavers, from which fact it derives its name—Beaver Lake.

NORRIS GEYSER BASIN is next reached, and luncheon is served. This is the oldest and among the most elevated (7,527 feet) of the thermal basins of the Park. Its hot springs, which are numerous, are in many instances curiously and beautifully formed and highly interesting; but its geysers (with, perhaps, two or three exceptions) possess less of the awfully grand eruptive power which characterize most of the geysers of the Firehole Valley. Approached on a

cool day the region about Norris suggests a great manufacturing center—so much vapor is seen rising above the bordering tree-tops.

GIBBON CAÑON AND FALLS. Continuing southward the visitor journeys through a stretch of cool forest, descends a long, sloping hill, and, crossing Elk Park, enters Gibbon Cañon—a rocky defile four miles in length, whose cliffs seem reluctant to open wide enough to allow both the stage road and the clear waters of Gibbon River a passage. The wild grandeur of this rugged chasm is difficult of adequate portrayal. On this side precipitous bluffs frown down upon the passer-by; on that, a dense growth of pines clothes the steep mountain-side with dark-green drapery. Here, a hissing steam-vent fills the air with sulphurous vapors; there, a fiercely boiling caldron pours its scalding overflow across the roadway, beneath the very feet of the stage



GLIMPSE OF SHOSHONE LAKE

horses, and, as a fitting *denouement* (at the cañon's exit), the foam-flecked river, tossed and fretted by tortuous windings, obstructing bowlders and rocky rapids, plunges into a gorge with a fall of a hundred feet and more, and, deflecting sharply, is lost to view.

THE GEYSERS. Next come the geysers of the Firehole Valley. These are distributed along either bank of the Firehole (Upper Madison) River for a distance of ten miles, being grouped in three districts or basins, known as the Lower, Midway and Upper Basins. At the large, new hotel near the Fountain Geyser (Lower Basin) stages halt for the night, and the displays of the Fountain and the odd bubbling of the near-by Paint Pots absorbs general attention. The hot springs of this locality number nearly seven hundred—exclusive of seventeen geysers.

THE MIDWAY BASIN, five miles farther south, boasts the largest geyser ever known. This is Excelsior; its crater—a huge cavity measuring 200 by 330 feet—being, in fact, a lake of violently-boiling water, above which constantly rise dense volumes of steam. Any phenomena more awe-inspiring than the eruptions of this monster geyser are difficult to imagine.

UPPER GEYSER BASIN, five miles still farther south, though comparatively small in area, contains twenty-six of these eruptive wonders, whose names, Old Faithful, Castle, Bee Hive, Giant, Splendid, etc., have become household words the world over.

ORIGIN AND THEORY OF GEYSERS. Geysers are merely eruptive hot springs. They differ from volcanoes only in that they erupt water instead of molten lava. The name is derived from an Icelandic word meaning "gusher." The Bunsen Theory of geyser phenomena, endorsed by



A GLIMPSE OF YELLOWSTONE LAKE.

Prof. Tyndall and other eminent men of science, is:-I. The presence of igneous rocks (still retaining their heat) at a considerable distance below the surface of the earth's crust. 2. Meteoric water (supplied mainly by snow and rainfall) having access to these heated rocks. 3. A tube by which the heated water may reach the surface. This tube is kept filled (or nearly so) with water as the result of lateral drainage. The temperature of this water-column, at any given point in the geyser tube, is below the boiling temperature corresponding to the atmospheric pressure at that point. Steam is constantly forming below, becoming sufficiently expansive in time to lift the water-column slightly. Thus the all but boiling water deep down in the tube is raised to a level where the pressure from above is less than that required to prevent ebullition. The result is an almost instantaneous generation of steam; the layers of water, being successively relieved of pressure, rising and flashing explosively into gaseous form. Then follows the

eruption, or violent expulsion of water and steam from the geyser tube, which phenomenon continues until the tube is nearly emptied, when a period of rest ensues. The character of the water supply and the differing sizes and shapes of tubes will necessarily produce a wide variation in eruptive displays. Geysers (so far as known) exist only in Iceland, New Zealand, the Azores, Thibet, and the Yellowstone National Park—those of the last named locality being by far the most powerful and interesting as well as easy of access.

In a paper read before the Cardiff (Wales) Naturalists' Society, Prof. Chas. T. Whitwell said: "Nowhere else, I believe, can be seen, on so grand a scale, such clear evidence of dying volcanic action. We seem to witness the deaththroes of some great American Enceladus. Could Dante have seen this region he might have added another terror to his Inferno." And, continuing, the same writer quotes



Lord Dunraven, as saying that a view of the Firehole Valley gave him the impression that some modern cities had been overwhelmed, and had so lately sunk amid flames into the bowels of the earth that the smoke of their ruins was still ascending through heaps of smoldering ashes.

THE NEW ROAD FROM THE UPPER BASIN ACROSS THE CONTINENTAL DIVIDE, along past Kepler's charming cascades and Shoshone Lake-the practical source of the Snake or Lewis Fork of the Columbia-to that gem par excellence of the Rocky Mountains, Yellowstone Lake, is one of the most delightful thoroughfares of the Park, and, connecting, as it does, with the road leading from the outlet of the lake in question to the falls and cañon, makes it possible for visitors to reach all points of marked interest, lying to the south and east of Norris Basin, without retracing any part of the route—a thing heretofore impracticable.

LAKE YELLOWSTONE, the largest body of water in the world at so great an altitude (7,788 feet), is one of those enchanting lakes whose praises the world never tires of sounding. The view from the broad verandaed hotel at the *outlet* is sublime indeed. One looks across an inland sea (150 square miles in size) whose island-dotted bosom, blue as sapphire, sparkles in the clear sunshine like molten glass—a veritable anglers' *paradise*.

"Secluded amidst the loftiest peaks of the Rockies (writes Mr. Langford), possessing strange peculiarities of form and beauty, this watery solitude is one of the most

attractive natural objects in the world."

"Such a vision (exclaims sober-minded Dr. Hayden) is worth a lifetime, and only *one* of such marvelous beauty will ever greet human eyes."

THE RIDE FROM THE LAKE TO THE FALLS AND CAÑON, eighteen miles, is among the most pleasant and interesting imaginable. The road winds along down the



LEAVING MAMMOTH HOT SPRINGS FOR CINNABAR.

nearly level, open, blooming Valley of the Yellowstone, passing, on the way, Mud Caldron and Sulphur Mountain and Spring—objects of no small interest—and crossing Hayden Valley and Alum Creek.

For some fourteen miles the broad, clear, trout-stocked river flows through this beautiful green-carpeted valley, its current unbroken by rock or rapid. Suddenly it begins to narrow; its erstwhile placid waters dart along with racehorse speed, now surging in foamy rapids, now dimpling into swirling whirlpools, each successive moment serving but to augment its headlong course, and bring more distinctly to the ear the sullen roar of the tremendous cataracts that mark its fearful, twofold plunge into the yawning, flaming canon below.

THE UPPER FALLS have a perpendicular drop of 140 feet. Rebounding from the shelving rocks in the basinlike abyss below, the falling waters dart forward in fan-shaped

surges that spread over the sea-green surface of the pool, and hurl high dense volumes of misty spray. A foot-path winds down to the pool, which has long been a favorite spot with wielders of the trout rod.

THE GREAT FALLS AND GRAND CAÑON OF THE YELLOWSTONE. "There is nothing in the Park (writes Prof. Whitwell), there are few sights in the world, so wonderous and so weird as the *Great Falls* and *Grand Cañon of the Yellowstone*. The scene from the brink of the falls, looking into the profound depth of the cañon, is of strange majesty and indescribably awe-inspiring. The advancing



GIANT GEVSER

volume of water flows rapidly and compactly to the brink, and falls with a tremendous shock into a large, circular, foaming caldron, bounded by cliffs a thousand feet high. Along the sides of the cañon, the walls are in many places fashioned into pyramids. The tints of yellow, deep red, etc., are due to the action of the hot springs, the weather, the presence of sulphur and the oxidation of iron, which here, as elsewhere, is Nature's principal pigment. I can echo the words of the Rev. Dr. Wayland Hoyt—that to have seen the Grand Cañon of the Yellowstone is an epoch

in my life. The Crater of Vesuvius is the only place in which I remember to have seen such a variety and wealth of natural color; but where the palette and pencil fail, how feeble the pen! John Ruskin should see and tell of this place."

From the cañon, visitors are returned to Cinnabar (via Norris and Mammoth Hot Springs), and the tour is complete.

THE HOTELS OF THE PARK are four in number (exclusive of the three lunch stations, at Norris, Upper Basin, and "Thumb" of Yellowstone Lake, respectively). These chief hostelries are located as follows: At Mammoth Hot Springs, Fountain Geyser (Lower Geyser Basin), outlet of Yellow-



YELLOWSTONE FALLS.

Stone Lake, and Grand Cañon. All are steam-heated, electric-lighted and supplied with bathing facilities (both hot and cold). Refreshing baths of hot mineral water may be enjoyed at the hotel at "The Fountain." In furnishing and table service these four hotels compare favorably with those of metropolitan cities.

TELEGRAPHIC COMMUNICATION. The Yellowstone Park Association has telegraph service at all hotels and lunch stations (except Larry's) connecting with the Western Union Telegraph Company.

Rates and Arrangements for the Yellowstone Park Tour.

HOTELS.—Comfortable hotels are situated at all important points in people; that at Fountain (Lower Geyser Basin), 250 people; Yellowstone Lake Hotel, 125 people; and Grand Cañon Hotel, 250 people. All of these hotels are steam-heated and lighted by electricity.

TRANSPORTATION.—The first regular stage making the Park tour will leave Mammoth Hot Springs June 1st. This service will be continued until October 1st, when the last stage making the round trip will leave Mammoth Hot Springs. The equipment is the best obtainable, consisting mainly of Concord coaches.

TICKET RATES.—\$14.00 and \$50.00 tickets on sale at Livingston. Mont, May 31st to September 30th, and at eastern and western termini from May 29th to September 28th. The \$14.00 ticket includes railroad and stage fares Livingston to Mammoth Hot Springs and return and one and three-quarter days' board. The \$50.00 ticket includes railroad and stage fares Livingston to Cinnabar, Mammoth Hot Springs, Norris, Lower and Upper Geyser Basins, Yellowstone Lrke, Grand Cañon and Falls of the Yellowstone and return (Breakfast going and Dinner returning on Park Branch Dining Car), and six and one-quarter days' board at the Park Association hotels. \$120.00 ticket on sale at St. Paul, Minneapolis and Duluth, Minn., Ashland, Wis., Portland, Ore., and Tacoma, Wash., May 28th to September 28th; by eastern lines, May 28th to September 27th; covers the expenses of the round trip from eastern or western terminals named to and through the Park, such as railroad fares, one double berth in Pallman Sleeping Car, meals in Northern Pacific Dining Cars, transportation through the Park and accommodations for six and one-quarter days at the Park Association hotels. \$50.00 rail ticket St. Paul, Minneapolis, Duluth or Ashland to Livingston and return will be on sale at eastern terminals May 28th to September 28th. 29th to September 28th.

LIMITS AND CONDITIONS.—The \$14.00 and \$50.00 tickets will be good if used between June 1st and October 6th, inclusive. The \$120.00 ticket is limited to forty days, good going thirty days, returning ten days, but must be used in the Park before October 6th. The return portion of ticket must be signed and stamped at Mammont Hot Springs Hotel and presented on main line train for return passage within one day thereafter; stop-overs will be allowed on these tickets within the final limit of same, at or east of Billings, Mont., and at or west of Helena, Mont. Limit of \$50.00 rail ticket same as the \$120.00 ticket, holder to be identified at Livingston ticket office before return; this ticket is good for stop-over within transit limits.

PACIFIC COAST EXCURSIONS.—Round-trip excursion tickets are on sale daily at St. Paul, Minneapolis, Duluth or Ashland, via Northern Pacific Railroad, to Tacoma, Portland, Seattle or Victoria and return, at rate of 880.00; tickets may read going via Cascade Division, returning via Columbia River, or vice versa, or returning via Canadian Pacific Railway to St. Paul, Minneapolis or Port Arthur. Portland tickets will be issued good to return via Union Pacific Railway to Omaha or Kansas City. Round-trip excursion tickets are also on sale via Northern Pacific Railroad to San Francisco via the Shasta Route or ocean, returning the same way, or to any Missouri River terminal, or Minneola or Houston, at rate of \$95.00; to St. Louis or New Orleans at \$101.00; to St. Paul or Minneapolis, via Missonri River, \$102.90. The above tickets are good for six months, with a going limit of sixty days to Tacoma or Portland and permit of stop-overs in both directions. No change of route or extension of limits can be granted.

Low excursion rates are in effect to Montana and eastern Washington points. Full particulars are given in "Wonderland, Jr."

ALASKA EXCURSIONS.—Tickets will be on sale May 1st to September 30th from St. Paul, Minneapolis, Duluth or Ashland to Sitka, including meals and berth on steamer north of Tacoma, at \$175.00. The most notable book in regard to this tour is "A Woman's Trip to Alaska," by Mrs. General C. H. T. Collis, Cassell Publishing Co., New York City.

Call upon or write any of the following agents for a copy of "Wonderland," our illustrated folders on hunting and fishing, the Hotel Broadwater,

F All rates named above are subject to change without notice further than that required by law.

J. M. HANNAFORD,

CHAS. S. FEE, . HANNAFORD, General Traffic Manager. St. PAUL, MINN. Gen'l Pass. and Ticket Agt.

MAP OF THE YELLOWSTONE NATIONAL PARK Compiled from different official explorations and our personal survey, 1882. MT LONGFELLOW FORESTS MT WASHEURN DUNRAVEN PH SULPHUR HILLS MT CRITTENDEN YELLO| WSTONEMT.DOANE MT MT STEVENSON LANGFORD PINGIR MT HUMPHEYS YELLOWSTONE NATIONAL PARK MT MT TURRET FORUM

